

Nuclear Material Stabilization and Disposition (RL-0011)

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Stabilization & Packaging Team



Last Special Nuclear Material Can Welded

OVERVIEW

This section addresses work in Project Baseline Summary RL-0011, Nuclear Material Stabilization and Disposition.

NOTE: Unless otherwise noted, all information contained herein is as of the end of January 2004.

NOTABLE ACCOMPLISHMENTS

The RL fully endorsed FH's nomination of the Plutonium Finishing Plant (PFP) Stabilization and Packaging Project (SPP) for the Project Management Institute project of the year. The endorsement was supported by a letter dated February 3, 2004, commending the SPP for completing under budget; demonstrating FH's ability to manage and control costs in an effective and strategic manner; applying lessons and principles of good project management; and an excellent example of teamwork, accountability, and results-oriented cleanup for U.S. taxpayers and residents.

Stabilization of Nuclear Materials

Metals, Alloys, Oxides and Polycubes: Stabilization field work was completed this month, a little over two weeks ahead of schedule. A total of 5,793 oxide/mixed oxide items have now been stabilized and packaged to DOE Standard DOE-STD-3013-00 criteria. A total of 2,239 3013 cans has now been generated. The required documentation, including nondestructive assessment (NDA) batch reports, standard 3013 database input, and the validation of all data, is expected to be complete in early February.

Maintain Safe and Secure Special Nuclear Materials (SNM)

The Vault Safety and Inventory System (VSIS) is no longer needed because all of the material in the cans that used the system have been stabilized. The resulting cost savings of not using the VSIS and its supporting maintenance contract is \$1.9 thousand per month.

Maintain Safe and Compliant PFP

PFP successfully completed a waste transfer from 241-Z, tank D5, to tank farms. This will allow for the closure of Recovery Plan PFPR-03-006 in early February 2004, which will support the start of initial 241-Z Decontamination and Decommissioning (D&D) activities.

Disposition PFP Facility

Transition 232-Z Facility:

The public review of the 232-Z Engineering Evaluation/ Cost Analysis (EE/CA) was completed on January 30, 2004. Fifteen comments from three public sources and the Oregon State Department of Energy were received. Resolution of these items is expected in late February.

The data quality objectives and the sampling analysis plan were completed and are in the final stages of the FH approval cycle. These documents are expected to be transmitted to RL and the State of Washington Department of Ecology (Ecology) in mid-February.

NOTABLE ACCOMPLISHMENTS, CONTINUED

The Pacific Northwest National Laboratory has provided a Cerium Nitrate decontamination reduction/neutralization recommendation to minimize combustion issues which may have been encountered in the Rocky Flats Environmental Technology Site (RFETS) glovebox fire. If accepted, this recommendation will be applied to appropriate deactivation activities at PFP.

Transition 241-Z Facility: FH and RL reached final consensus with Ecology regarding resolution of Ecology's comments on the building 241-Z technical support document closure plan. Agreement was also reached to issue the required 30-day notification that the closure plan will be issued for a 45-day public comment review period starting in March.

The application of a contamination control fixative via aerosol fogging was completed for 241-Z, tank D4, to support initial underground vault characterization and decontamination activities.

Legacy Plutonium (Pu) Holdup Removal and Disposition: Legacy Pu holdup material removal from Gloveboxes MT-6 and HC-9B was completed in January. Material removal from gloveboxes MT-1 and MT-2 is under way, and is expected to complete in early May.

Another increment of legacy Pu holdup material was collected in early January and is expected to be invoiced in early March, three weeks ahead of schedule.

Laboratory Transition: A trip to the RFETS is being planned for early February to review their NDA program, processes, techniques, organizational structure and lessons learned. The visit will also include discussions with RFETS Safeguards, D&D, and other NDA data users. RL will accompany the PFP NDA staff to Rocky Flats.

Formal in-house NDA training classes for PFP chemical technicians and scientists were finalized, and classes were initiated in January. These classes are divided into eight modules which are presented over a two-week period.

Transition Operations Support: The initial draft rebaseline of the D&D sub-project to accommodate the two-year SNM de-inventory delay was completed in late January. A second iteration reflecting new budgetary constraints is under way and is expected to be completed in early February as planned.

Internal review of the 234-5Z Balance of Plant EE/CA was completed January 23, 2004. Comment incorporation is under way to support transmittal of the EE/CA to RL in mid-February.

ISSUES

SNM De-inventory Delay: RL's direction to delay the PFP SNM de-inventory will require a major revision of the PFP Closure Project baseline, including Performance Incentive objectives.

FY 2004 FH FUNDS VS FORECAST (\$000)

	FY 2004 Anticipated Funding w/Carryover	FY 2004 Fiscal Year Spend Forecast	Variance
Nuclear Materials Stabilization & Disposition	\$ 164,513	\$ 163,094	\$ 1,419

The Fiscal Year Spend Forecast reflects the RL-directed two-year delay in SNM de-inventory as well as the disposition of fuel stored at PFP. The current forecast indicates a \$1,419K carry-over of funded work scope from FY 2004 to FY 2005.

FY 2004 SCHEDULE/COST PERFORMANCE (\$000)

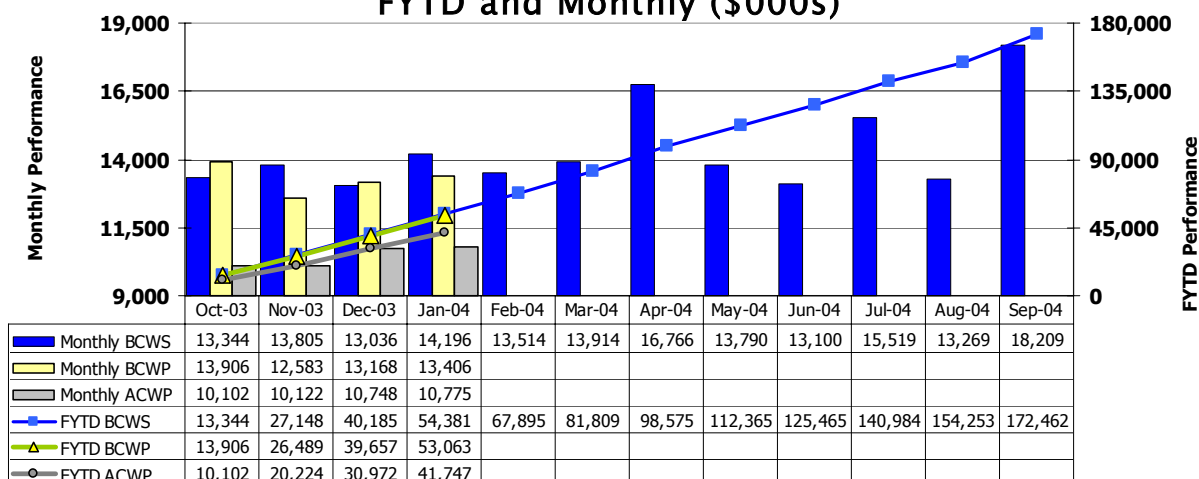
	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
Nuclear Materials Stabilization & Disposition	54,381	53,063	41,747	-1,318	-2%	11,316	21%	172,462

NOTE: Numbers are rounded to the nearest \$K.

Schedule Variance (-\$1,318K/-2%): The schedule variance is due to the RL-directed delay in the SNM de-inventory at PFP with only limited progress to date for packaging and related preparations. Re-planning has been initiated to document the baseline impacts associated with a two-year delay in SNM de-inventory. The negative schedule variance is partially off-set by the early completion of stabilization.

Cost Variance (\$11,316K/21%): The favorable cost variance is due to outstanding performance in three primary areas: Stabilization, D&D and the Closure Services Allocation. Stabilization progress reflects acceleration of FY 2004 work scope into FY 2003, with performance now being claimed in FY 2004. D&D work scope accomplished in late September 2003 was reported in FY 2004. Also, partial performance on the staff ramp-up was claimed, since staff have been hired with minimal costs-to-date. The Closure Services Allocation contributed \$2,344K to the positive cost variance as a result of revenue and work transfer alignments that will self-correct during the year (i.e., 222-S transfer, and RL-12 and RL-40 increases for approved baseline change requests), and the management hold on work scope that will be cut to align to the FY 2004 funding appropriation from DOE. The favorable variance is not available to reallocate to other sub-projects.

Performance Analysis FYTD and Monthly (\$000s)



MILESTONE ACHIEVEMENT

Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comments
TRP-02-501	Complete Stabilization and Packaging of Polycubes	DNFSB	3/31/03	2/28/03		Complete
TRP-03-501	Submit Facility End Point Criteria Document to Ecology	TPA	9/30/03	9/30/03		Complete
TRP-03-503	Submit to Ecology a PFP Residual Chemical Hazards Assessment	TPA	12/31/02	12/27/02		Complete
TRP-03-504	Submit Closure Plan for 241-Z Waste Treatment Facility TSD Unit to Ecology	TPA	7/31/03	7/25/03		Complete
TRP-04-506	Completion of all Plutonium (Pu) Stabilization & Packaging	PI	2/18/04			On Schedule
TRP-04-508	Complete Repackaging of PFP Residues and Ship to Central Waste Complex (CWC)	TPA	4/30/04			On Schedule
TRP-05-501	Discontinue Waste Discharges from the 241-Z Tanks to Tank Farms	TPA	6/30/05			On Schedule
TRP-05-503	Special Nuclear Material Transferred to Savannah River Site of DOE Approved Interim Storage	PI	9/30/05		9/30/07	DOE has notified FH that the current shipping schedule will not be met.
TRP-05-504	Legacy Pu Holdup Removed & Dispositioned	PI	9/30/05			On Schedule
TRP-06-501	Complete 100% of Legacy Pu Holdup Removal & Disposition	TPA	9/30/06			On Schedule
TRP-06-502	Complete Transition & Dismantlement of the 232-Z Bldg Incinerator	TPA	9/30/06			On Schedule
TRP-06-503	Protected Area Eliminated	PI	12/31/05		12/31/07	Protected Area elimination will not be met due to delayed de-inventory
TRP-06-507	PFP Facilities (61 Buildings) Ready For Demolition	PI	9/30/06		TBD	Demo ready of 61 buildings will not be met. Two year SNM de-inventory delay, and funding reduction has necessitated a re-sequencing of D&D work scope.